

## DRAFT Certification Criteria (As of: Apr. 9, 2013)

Note: Items in blue not enforced by AQS Data Certification Report

Assessment	Current CFR Requirement or Guidance	Green (Acceptable)	Yellow (Warning)	Red (Recommend N Flag)	Comments
<b>Technical Systems Audit</b>	PQAO every 3 years	TSA within 3 years	TSA within 4 years	TSA > 5 years	Not a monitoring Org responsibility. Will be reported on summary page not by pollutant
<b>Gaseous Criteria Pollutants</b>					
<b>Routine Data Completeness</b>	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use <b>100 *Number of hourly obs/ number of hours in monitor sample period for year</b>
<b>QAPP Approval</b>	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for "N" flag if QAPP not approved.
<b>1-Point QC Completeness</b>	75%	≥75%	65-75%	<65%	Based on 26 1-point QC for a year and if a monitor closes during the year it will calculate the requirements based on the portion of the year the monitor operated.
<b>1-Point QC Precision</b>	7% O <sub>3</sub> , 10% others	≤7% O <sub>3</sub> , 10% others	8-20% O <sub>3</sub> 11-25% others	> 20% O <sub>3</sub> > 25% others	Based on all valid 1-point QC checks in AQS for the year
<b>1-Point QC Bias</b>	±7% O <sub>3</sub> , ±10% others	≤ ±7% O <sub>3</sub> , ≤ ±10% others	± 8-20% O <sub>3</sub> ±11-25% others	> ±20% O <sub>3</sub> > ±25% others	Based on all valid 1-point QC checks in AQS
<b>Annual PE Completeness</b>	1 PE/year 3 audit levels	1 PE/year 3 audit levels	1 PE/year 2 audit levels	No PE or 1 audit level	
<b>Annual PE Bias</b> O <sub>3</sub> , SO <sub>2</sub> , NO <sub>2</sub>  CO	≤ ±1.5 ppb / ±15%  ≤ ±0.03 ppm/ ± 15%	≤ ±1.5 ppb / ±15%  ≤ ±0.03 ppm/ ± 15%	≤ ± 1.6-3.0 ppb / ± 16-25% ≤ ± 0.04-0.06 ppm/ ± 16-25%	> ±3.0 ppb / ± 25%  > ±0.06 ppm/ ± 25%	<b>Use average PD of all PE values for the monitor</b>
<b>NPAP Audit Completeness - PQAO</b>	20% of sites in PQAO	20% of sites in PQAO	10-19% of sites in PQAO	<10% of sites in PQAO	Not a monitoring Org responsibility
<b>NPAP Bias</b>	≤ ±10% O <sub>3</sub> ≤ ±15% others	≤ ±10% O <sub>3</sub> ≤ ±15% others	± 11-20% O <sub>3</sub> ±16-25% others	> ±20% O <sub>3</sub> > ±25% others	<b>Median PD for all values at a site and Median PD for PQAO level estimate</b>
<b>NPAP Audit Completeness - Site</b>	4 levels	4 levels	2-3 levels	≤1 level	Not a monitoring Org responsibility

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<b>PM2.5 Criteria</b>					
<b>Routine Data Completeness</b>	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use <b>100 * Number of creditable samples / number of scheduled samples in monitor sample period.</b>
<b>QAPP Approval</b>	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for "N" flag if QAPP not approved.
<b>Flow Rate Audit Completeness</b>	<b>2 /year every 6 months</b>	<b>2/year every 5-7 months or 3 or 4 with one audit in 3 or 4 quarters</b>	<b>2 across 2 quarters</b>	<b>1 audit</b>	<b>Semi-annual flow rate audits</b>
<b>Flow Rate Audit Bias</b>	± 4% of transfer standard ± 5% from design	≤ ± 4% of transfer standard ≤ ± 5% from design	± 5-6% of transfer standard ± 6-7% from design	> ± 6% of transfer standard > ± 7% from design	design = design flow rate
<b>Collocation Completeness</b>	75%	≥75%	65-74%	<65%	By method designation
<b>Collocation Precision</b>	10%	≤ 10%	11-18%	>18%	By method designation
<b>PM2.5 PEP Completeness</b>	5 or 8	5 or 8	3-4 or 6-7	< 3 or 6	Not a monitoring Org responsibility
<b>PEP Bias</b>	±10%	≤ ±10%	± 11-20%	>± 20%	
<b>PM10 Continuous Methods</b>					
<b>Routine Data Completeness</b>	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use <b>100 * Number of valued statat (days per collection frequency) / total number of strata.</b>
<b>QAPP Approval</b>	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for "N" flag if QAPP not approved.
<b>Flow Rate verification Completeness</b>	75%	≥75%	65-74%	<65%	
<b>Flow Rate Verification Bias</b>	± 7% of transfer standard	≤ ± 7% of transfer standard	± 8- 9% of transfer standard	>± 9% of transfer standard	
<b>Flow Rate Audit Completeness</b>	<b>2 /year every 6 months</b>	<b>2/year every 5-7 months or 3 or 4 with one audit in 3 or 4 quarters</b>	<b>2 across 2 quarters</b>	<b>1 audit</b>	<b>Semi-annual flow rate audits</b>

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Flow Rate Audit Bias	± 7% of transfer standard	≤ ± 7% of transfer standard	± 8-9% of transfer standard	>± 9% of transfer standard	Semi-annual flow rate audits
<b>PM10 Manual Methods</b>					
Routine Data Completeness	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use <b>100 * Number of valued stata (days per collection frequency) / total number of strata.</b>
QAPP Approval	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for "N" flag if QAPP not approved.
Flow Rate Audit Completeness	<b>2 /year every 6 months</b>	<b>2/year every 5-7 months or 3 or 4 with one audit in 3 or 4 quarters</b>	<b>2 across 2 quarters</b>	<b>1 audit</b>	<b>Semi-annual flow rate audits</b>
Flow Rate Audit Bias	± 7% of transfer standard	± 7% of transfer standard	± 8-9% of transfer standard	>± 9% of transfer standard	Semi-annual flow rate audits
Collocation Completeness	75%	≥75%	65-74%	<65%	No requirement for collocation by method designation
Collocation Precision	10%	10%	≤ 11-18%	>18%	Precision estimate by PQAO
<b>Pb-TSP</b>					
Routine Data Completeness	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use 100 * Number of creditable samples / number of scheduled samples in monitor sample period.
QAPP Approval	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for "N" flag if QAPP not approved.
Flow Rate Audit Completeness	<b>2 /year every 6 months</b>	<b>2/year every 5-7 months or 3 or 4 with one audit in 3 or 4 quarters</b>	<b>2 across 2 quarters</b>	<b>1 audit</b>	<b>Semi-annual flow rate audits. Somewhat revised from the AMP255 to accommodate audits &lt;5 months or &gt; 7 months apart</b>
Flow Rate Audit Bias	± 7% of transfer standard	± 7% of transfer standard	± 8-9% of transfer standard	>± 9% of transfer standard	Semi-annual flow rate audits
Collocation Completeness	75%	≥75%	65-74%	<65%	
Collocation Precision	20%	20%	21-30%	>30%	
Pb PEP Completeness	5 or 8	4 or 7	3 or 6	< 3 or 6	Not a monitoring Org responsibility
Pb PEP Bias	±15%	±15%	± 15-25%	>± 25%	Average PD

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Assessment	Current CFR Requirement or Guidance	Green (Acceptable)	Yellow (Warning)	Red (Recommend N Flag)	Comments
Analysis Audit Completeness	75%	≥75%	65-74%	<65%	Average completeness by quarter than take average of all 4 quarters
Analysis Audit Bias	10%	10%	≤18%	>18%	
<b>Pb-PM10</b>					
Routine Data Completeness	75%	≥80%	80-70%	<70%	Based on CFR criteria for data use 100 * Number of creditable samples / number of scheduled samples in monitor sample period.
QAPP Approval	Approval date within 5 years of current date	Approval date within 5 years of current date	Approval date between 5-10 years	Not approved and/or approval date greater than 10 years	Could be sole reason for "N" flag if QAPP not approved.
Flow Rate Audit Completeness	2 /year every 6 months	2/year every 5-7 months or 3 or 4 with one audit in 3 or 4 quarters	2 across 2 quarters	1 audit	Semi-annual flow rate audits
Flow Rate Audit Bias	± 4% of transfer standard	≤ ± 4% of transfer standard	± 5-6% of transfer standard	> ± 6% of transfer standard	Semi-annual flow rate
Collocation Completeness	75%	≥75%	65-74%	<65%	
Collocation Precision	20%	20%	21-30%	>30%	
Pb PEP Completeness	5 or 8	5 or 8	3 or 6	< 3 or 6	Not a monitoring Org responsibility
Pb PEP Bias	±15%	±15%	± 16-25%	>± 25%	
Analysis Audit Completeness	75%	≥75%	65-74%	<65%	
Analysis Audit Bias	10%	10%	≤18%	>18%	

### Other Flags

Table	Field	Code	Summary	Comments
All	Monitor Type	Invalid	Monitor not assigned to a an AQS production status Monitor Type	Monitor type either missing from active monitor or assigned to value no longer supported (e.g. "Other")
PM2.5 Collocation, Monitor Summary	PQAO Criteria Met	N	PQAO level collocation not met Method designation not covered	If the PQAO acceptance criteria at the summary level is not met then an "N" is placed in any monitor row represented by that method designation. At times a method designation may not have been collocated with a like method designation.

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				I that case an "N" will be placed in any method designation that did not have a collocation represented for that method designation.
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